Listing of the Claims

1(Original). A method, comprising:

receiving a preamble by multiple antennas; and

sequentially evaluating signals from the multiple antennas to ascertain an antenna providing a higher signal quality than other antennas, wherein the evaluation is based on symbols in the preamble.

2(Original). The method of claim 1 wherein receiving the preamble further comprises:

receiving a frame that is transmitted by an 802.11 station, where the frame includes the preamble which contains a known training sequence.

3(Original). The method of claim 1 wherein sequentially evaluating signals from the multiple antennas further comprises:

demodulating the signals in a single receiver chain to generate quadrature signals; and

comparing the quadrature signals to determine which of the multiple antennas provides the higher signal quality.

4(Original). The method of claim 1 wherein receiving a preamble by multiple antennas further includes receiving the preamble by at least three antenna.

5(Original). The method of claim 1 further including:

comparing the antenna having the higher signal quality with the other antennas, one by one, to dynamically determine the antenna having the higher signal quality.

6(Original). The method of claim 1 further including:

incorporating the multiple antennas with a single receive chain on a Network Interface Card (NIC).

7(Original). The method of claim 1 further including:

selecting one of the other antennas when the signal quality of that antenna is higher than the other antenna.

8(Original). A method, comprising:

controlling a switch to sequentially evaluate signals received by at least three antennas in a single receiver chain where the signals are symbols in a preamble used to evaluate signal quality.

9(Original). The method of claim 8 further comprising:

evaluating the signals received by the at least three antennas to compare the at least three antennas as to the signal quality.

10(Original). The method of claim 9 wherein evaluating the signals further comprises:

comparing a first signal received by a first antenna with a second signal received by a second antenna to select the antenna that provides the higher signal quality.

11(Original). The method of claim 9 further comprising:

placing the at least three antennas into a first tier group and a second tier group in accordance with the signal quality.

12(Original). The method of claim 11 further comprising:

comparing signals from one antenna in the first tier group with signals sequentially selected from antenna in the second tier group to determine which antenna has the higher signal quality.

13(Original). The method of claim 11 further comprising:

exchanging antenna in the first tier group with antenna in the second tier group based on comparing signals, wherein the first tier group has antenna that provide a higher signal quality.

14(Original). The method of claim 13 further including:

verifying an address in a packet.

15(Original). A system comprising:

a Network Interface Card (NIC) having at least three antennas coupled through a switch to a single receiver chain; and

a processor coupled to the single receiver chain to compare quadrature signals that are demodulated from preamble symbols sequentially received by the at least three antennas, wherein the processor selects an antenna that provides a highest quality signal.

16(Original). The system of claim 15, wherein the preamble signal is received from an 802.11a/b station and the preamble signal includes ten short and two long symbols.

17(Original). The system of claim 15 further including:

a Static Random Access Memory (SRAM) coupled to the processor.

18(Original). The system of claim 15 wherein some of the at least three antenna are placed in a first tier group and others in a second tier group based on the highest quality signal.